

NCR - 19-7548



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3512-1

Job Sheet 201579



POSITIVE RECALL

Part No: D3512-1

Job Qty: 16 pcs

EFFECTIVE 19/10/19 AUTH SLO

Part Name: Wearplate



RELEASED PD DATE 19.10.24

Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/7/19

Job Tracking No:

Due Date: 10/31/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: URF DWG-D3512 REV.D IPP Rev:A New Issue 06-06-20 JLM IPP Rev:B Now SS as per Rev B 06-12-15 JLM
IPP Rev:C Rev C dwg 07-12-06 DD IPP REV:D 13.12.11 ECN13-619/ REV.D DWG DD VERF:JLM IPP REV:D
18.03.12 DWG REV.E12 DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Waterjet - Flow - 1 <i>CUT with DXF D3512-1</i>	16 pcs <i>3 Rev E SLO 19/10/19</i>	10/31/19	10/31/19	0.17	1.49	Waterjet - Flow		<i>19/10/19</i>
110	QC 2	16 pcs	10/31/19	10/31/19	0.00	16.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		<i>19/10/19</i>
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		

Plex 10/7/19 3:25 PM Dart.lajeunesse.marie

120	QC 8	16 pcs	10/31/19	0.00	0.00	QC 2 - 64	
						QC 2 - 65	
						QC 2 - 5	
						QC 2 - 71	
						QC 2 - 73	
						QC 2 - 69	
						QC 8 - 12	
						QC 8 - 14	
						QC 8 - 17	
						QC 8 - 20	
						QC 8 - 25	
						QC 8 - 3	
						QC 8 - 32	
						QC 8 - 33	
						QC 8 - 35	
						QC 8 - 39	
						QC 8 - 4	
						QC 8 - 44	
						QC 8 - 45	
						QC 8 - 49	
						QC 8 - 58	
						QC 8 - 8	
						QC 8 - 9	
						QC 8 - 68	
						QC 8 - 67	
130	Small Fab - Brake NC - B4B	16 pcs	10/31/19	0.25	0.45	QC 8 - 1 (A)	
						QC 8 - 47	
						QC 8 - 40	
140	QC 5	16 pcs	10/31/19	0.00	0.00	QC 8 - 52	
						QC 8 - 23	
						QC 8 - 57	
						QC 8 - 76	
						QC 8 - 61	
						Small Fab - Brake - 1 - B4B	
						Small Fab - Brake - 2 - B4B	
						Small Fab - Brake - 3 - B4B	
						QC 5 - 10	
						QC 5 - 12	
150	Packaging 3-1 - Stock - B4B	16 pcs	10/31/19	0.00	0.00	QC 5 - 17	
						QC 5 - 18	
						QC 5 - 19	
						QC 5 - 22	
						QC 5 - 24	
						QC 5 - 3	
						QC 5 - 43	
						QC 5 - 49	
						QC 5 - 51	
						QC 5 - 58	
						QC 5 - 68	
						QC 5 - 9	
						QC 5 - 50	
						QC 5 - 30	
						QC 5 - 40	
						QC 5 - 61	
						QC 5 - 81	
						Packaging 3 - 1 - B4B	
						Packaging 3 - 2 - B4B	

DAS
40
9-89

OCT 16 2019

DAS
30
9-89

OCT 22 2019

DAS
40
9-89

OCT 23 2019



Packaging 3 - 3 - B4B	
Packaging 3 - 4 - B4B	
Packaging 3 - 5 - B4B	
Packaging 3 - 6 - B4B	
Packaging 3 - 7 - B4B	
Packaging 3 - 8 - B4B	
Packaging 3 - 9 - B4B	
Packaging 3 - 10 - B4B	
Packaging 3 - 11 - B4B	
Packaging 3 - 12 - B4B	<i>EL</i>
Packaging 3 - 13 - B4B	
Packaging 3 - 14 - B4B	
Packaging 3 - 15 - B4B	
Packaging 3 - 16 - B4B	
Packaging 3 - 17 - B4B	
Packaging 3 - 18 - B4B	
Packaging 3 - 19 - B4B	
Packaging 3 - 20 - B4B	
Packaging 3 - 21 - B4B	
Packaging 3 - 22 - B4B	
Packaging 3 - 23 - B4B	
Packaging 3 - 24 - B4B	
Packaging 3 - 25 - B4B	
Packaging 3 - 26 - B4B	
Packaging 3 - 27 - B4B	
Packaging 3 - 28 - B4B	
Packaging 3 - 29 - B4B	
Packaging 3 - 30 - B4B	
Packaging 3 - 31 - B4B	
Packaging 3 - 32 - B4B	
Packaging 3 - 33 - B4B	
Packaging 3 - 34 - B4B	
Packaging 3 - 35 - B4B	
Packaging 3 - 36 - B4B	

160 QC 21 - SA

16
pcs

10/31/19

0.00 0.00

QC 21 - SA - 21

Des

QC 21 - SA - 70

21

QC 21 - SA - 53

9-55

Part Op **100** - 1-Cut as per Dwg Dwg Rev: *E* Prog Rev: *E* 2-Deburr if necessary
 Descriptions: **110** - QC2- Inspect parts off machine FAI/FAIB
120 - QC8- Inspect parts - second check
130 - small fab - Form as per dwg
140 - QC5- Inspect part completeness to step on W/O
150 - Identify as per dwg & Stock Location: *W/O*
160 - QC21- Final Inspection - Work Order Release

OCT 24 2019

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304S16GA	304/316 Sheet .063	4.6400 sf (.29 ea)	100-Waterjet - Flow - 1	<i>5207058</i>

Job Allocations

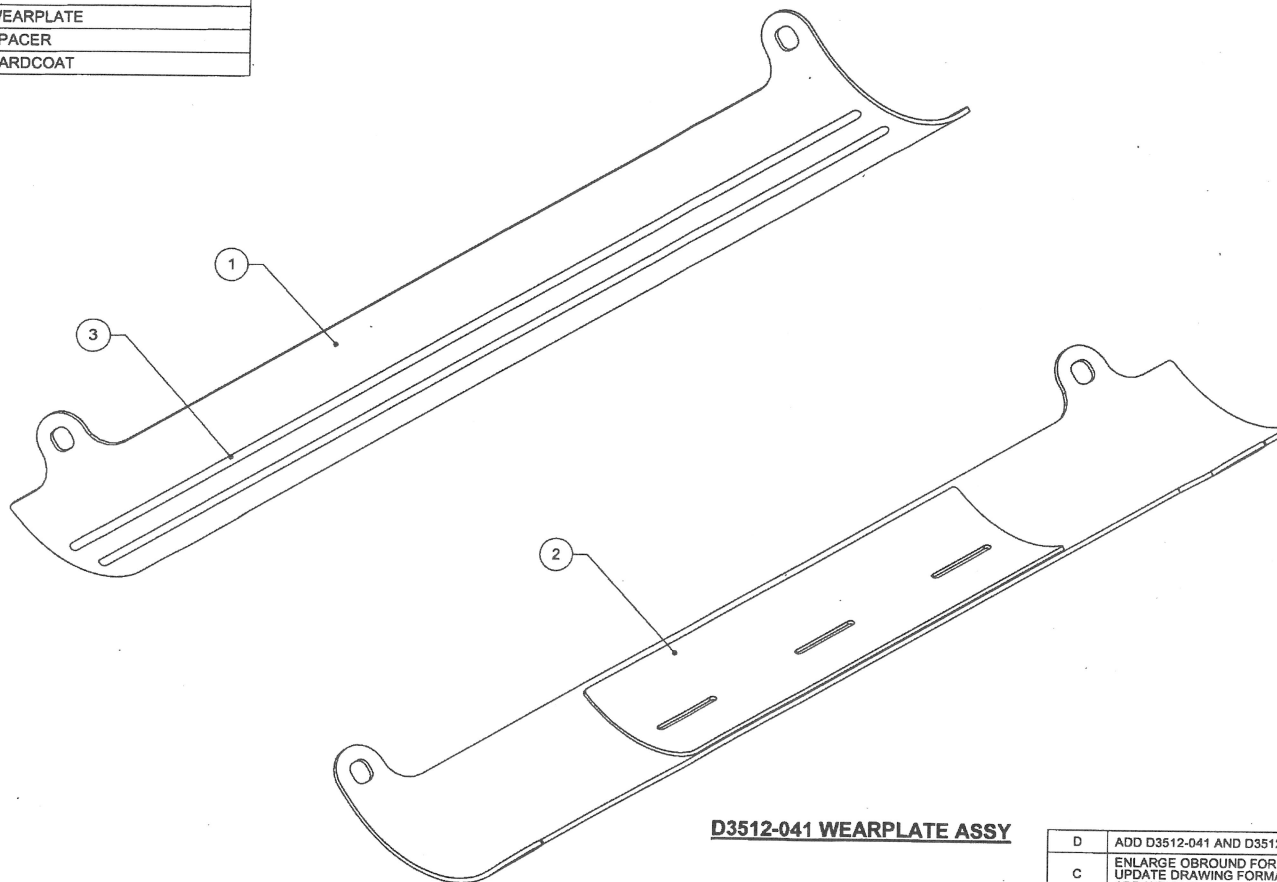
Operation	Component Part	Required	Inventory	Allocated
100-Waterjet - Flow - 1	M304S16GA	5	419	0

Part Specifications

Specifications could not be found.

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ITEM	QTY -041	P/N	DESCRIPTION
	X	D3512-041	WEARPLATE ASSY
1	1	D3512-1	WEARPLATE
2	1	D3512-3	SPACER
3	A/R	2059B	HARDCOAT

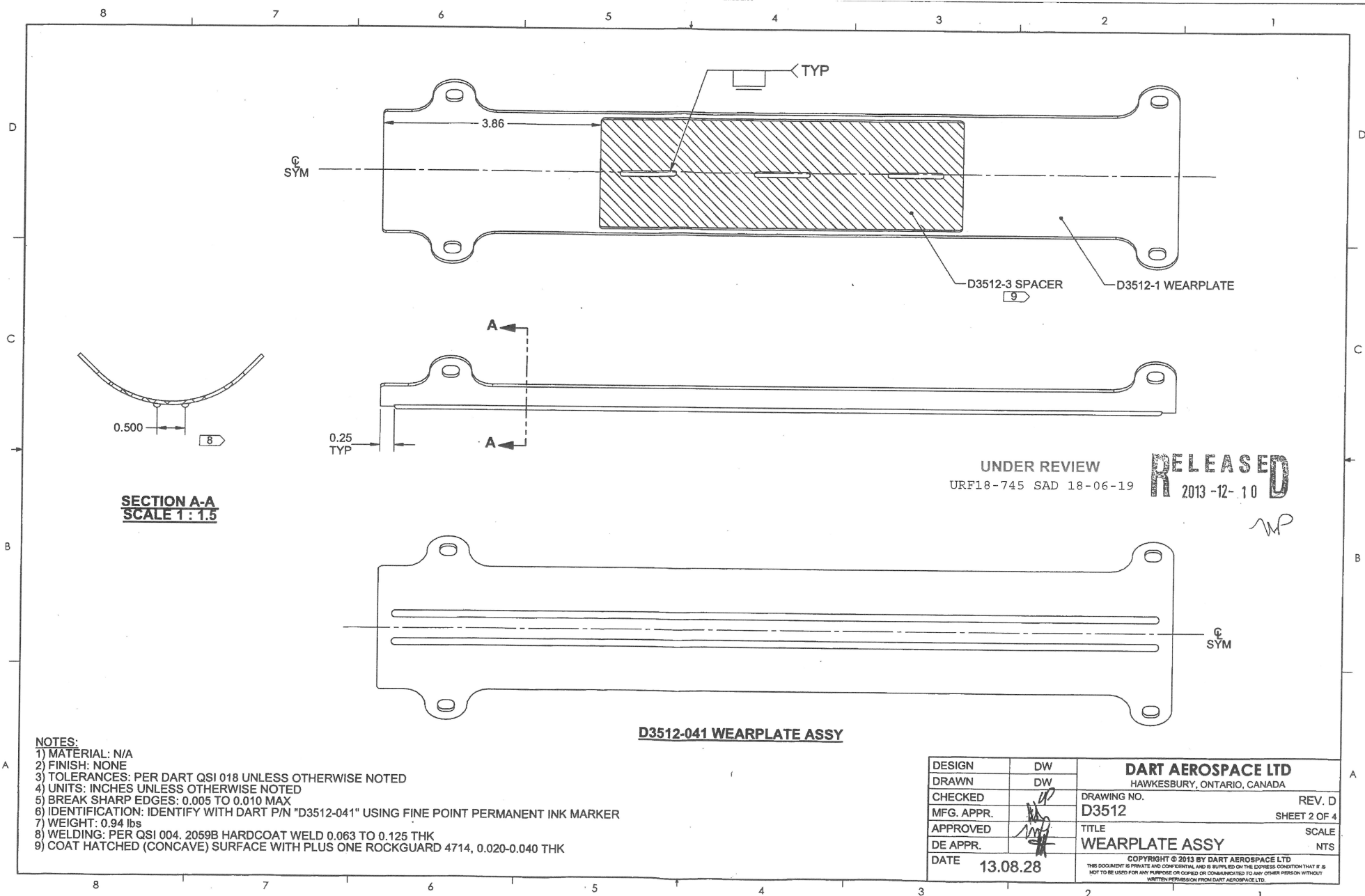


D3512-041 WEARPLATE ASSY

RELEASED
2013-12-10

UNDER REVIEW
URF18-745 SAD 18-06-19

REV.	DESCRIPTION	BY	DATE
D	ADD D3512-041 AND D3512-3	DW	13.08.28
C	ENLARGE OBOURD FOR EASIER ASSEMBLY UPDATE DRAWING FORMAT ADD WEIGHT	PH	07.10.05
B	CHANGE MATERIAL TO STAINLESS STEEL	PH	06.10.27
A	NEW ISSUE	PH	06.04.21
DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3512 TITLE WEARPLATE ASSY DATE 13.08.28	
DRAWN	DW		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.08.28	WEARPLATE ASSY COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

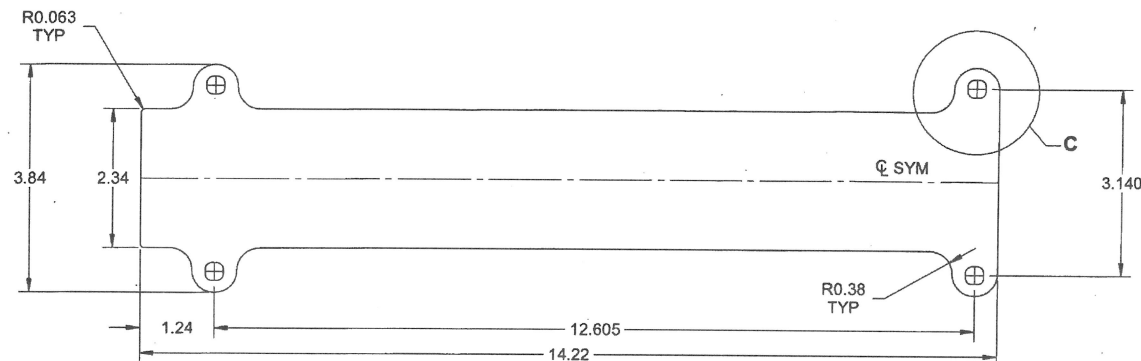


8 7 6 5 4 3 2 1

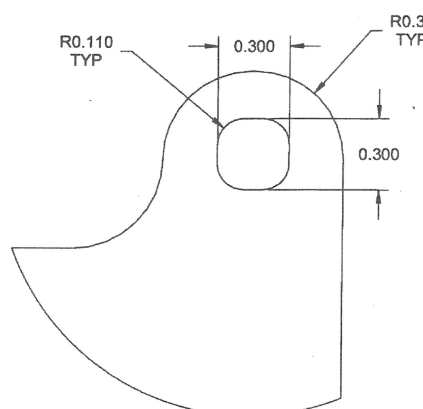
D D

C C

B B



D3512-1F



DETAIL C
SCALE 2X

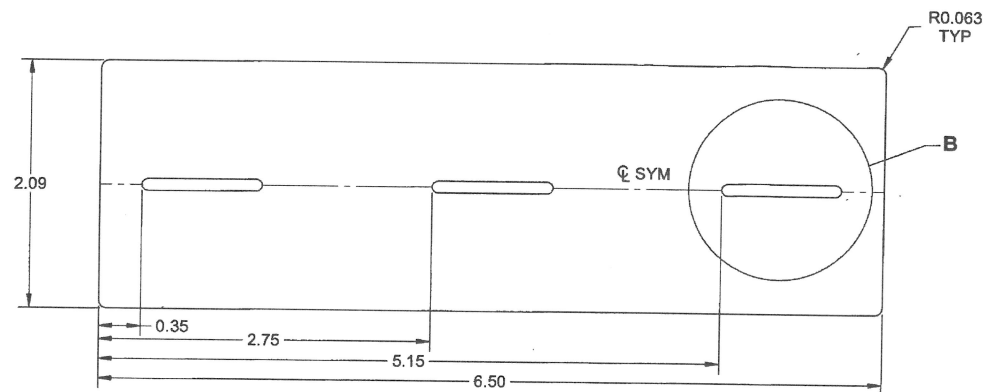
UNDER REVIEW
URF18-745 SAD 18-06-19

RELEASED
2013-12-10
WP

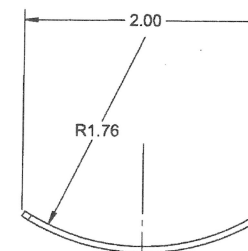
- NOTES:
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER MIL-S-5059 OR AMS 5513 OR 5524 OR ASTM A240 18 GAUGE 0.063 THICK (REF DART SPEC. MS304S16GA)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.63 lbs

DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	UP	DRAWING NO. D3512	REV. D
MFG. APPR.	MS	SHEET 3 OF 4	
APPROVED	MS	TITLE	SCALE
DE APPR.	MS	WEARPLATE ASSY	NTS
DATE	13.08.28	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

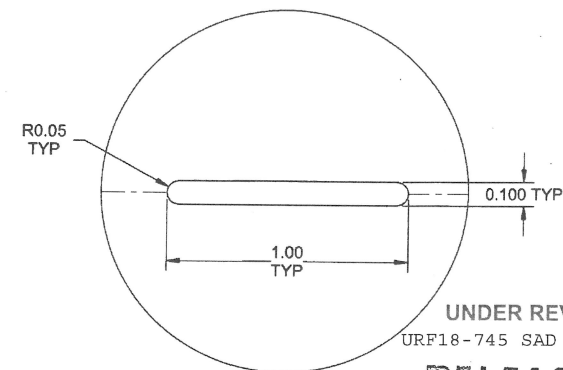
8 7 6 5 4 3 2 1



D3512-3F FLAT PATTERN



D3512-3 SPACER
MAKE FROM D3512-3F



DETAIL B
SCALE 2X

UNDER REVIEW
URF18-745 SAD 18-06-19

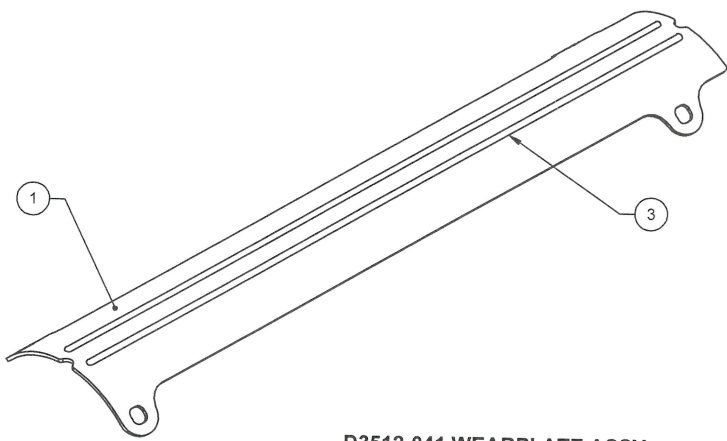
RELEASED
2013-12-10

NOTES:

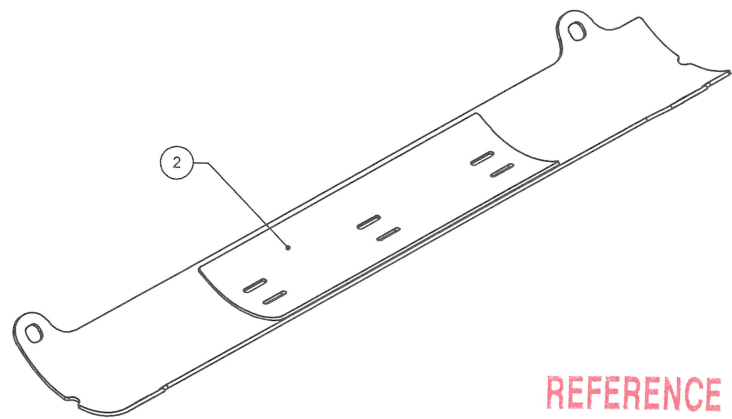
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER MIL-S-5059 OR AMS 5513 OR 5524 OR ASTM A240 18 GAUGE 0.050 THICK (REF DART SPEC. MS304S18GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.19 lbs

DESIGN	DW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D3512	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE ASSY	NTS
DATE	13.08.28	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

ITEM	QTY	P/N	DESCRIPTION
	X	D3512-041	WEARPLATE ASSY
1	1	D3512-1	WEARPLATE
2	1	D3512-3	SPACER
3	A/R	8259 \ 2059B	HARD SURFACING



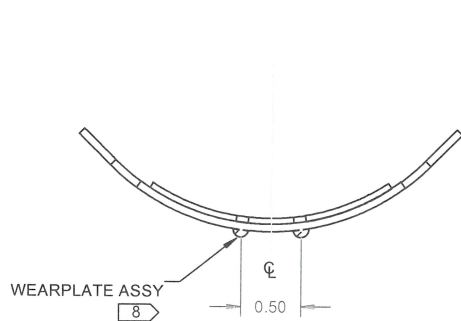
D3512-041 WEARPLATE ASSY



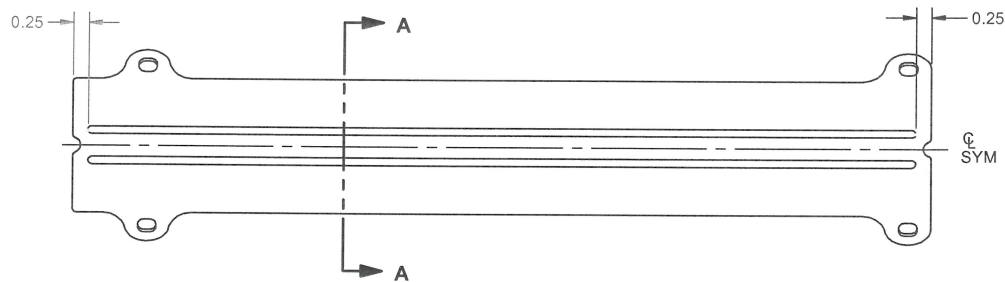
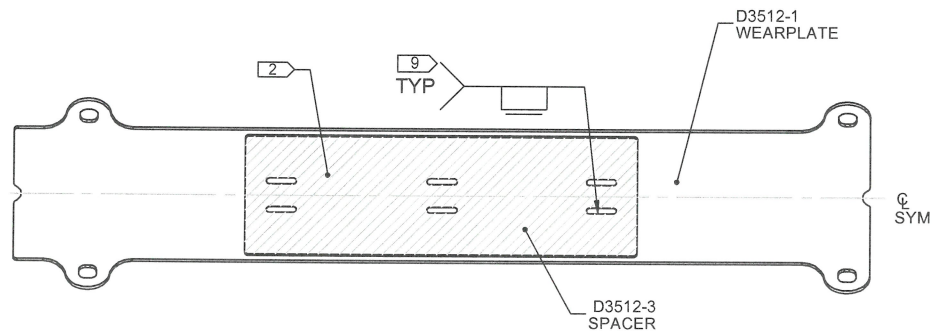
REFERENCE ONLY

REV.	DESCRIPTION	BY	DATE
E	ADJUSTED WIDTH OF PART FOR FIT AND FUNCTION, DIM 3.63 WAS 3.84 (ZN D3-3). UPDATE NOTE 8 (ZN A8-2), ADD NOTCHES (ZN D3-3 & D8-3). CHANGE SLOTS TO QTY 6 AND LENGTH TO 0.5 (ZN D4-4). GENERAL UPDATE OF DRAWING TO CURRENT STANDARDS.	SAD	18.03.07
D	ADD D3512-041 AND D3512-3	DW	13.08.28
C	ENLARGE OBOUND FOR EASIER ASSEMBLY UPDATE DRAWING FORMAT ADD WEIGHT	PH	07.10.05
B	CHANGE MATERIAL TO STAINLESS STEEL	PH	06.10.27
A	NEW ISSUE	PH	06.04.21
DESIGN	DW	DART AEROSPACE USA, INC. HILLSBORO, OR	
DRAWN	SAD		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	DD	D3512	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE ASSY	NTS
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WORK IN PROGRESS



SECTION A-A 
SCALE 2X



D3512-041 WEARPLATE ASSY

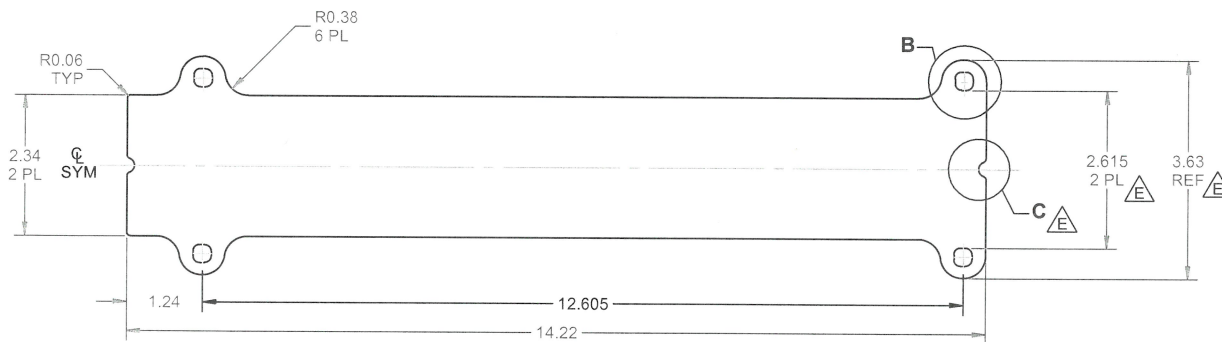
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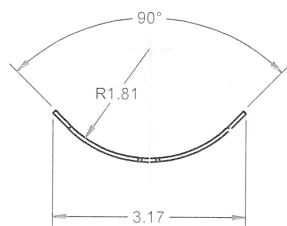
- 1) MATERIAL: N/A
- 2) FINISH: COAT HATCHED (CONCAVE) SURFACE WITH TEXTURED COATING, 0.02-0.04 THICK, PER DART QSI 005 4.9
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 METHOD 6.1
- 7) WEIGHT: 0.87 lbs
- 8) APPLY HARD SURFACING WELD BEAD 0.06 - 0.13 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR
APPLY HARD SURFACING WELD BEAD 0.06 - 0.13 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)
- 9) WELD PER QSI 004

WORK IN PROGRESS

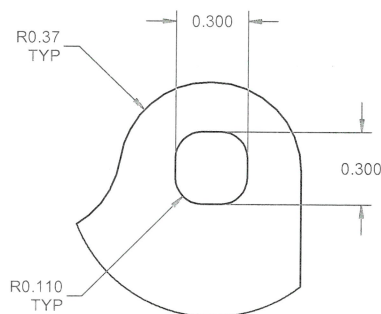
DESIGN	DW	DART AEROSPACE USA, INC.	
DRAWN	SAD	HILLSBORO, OR	
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	DD	D3512	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE ASSY	NTS
DATE	18.03.07	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC. THE DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



D3512-1F WEARPLATE
(FLAT PATTERN)

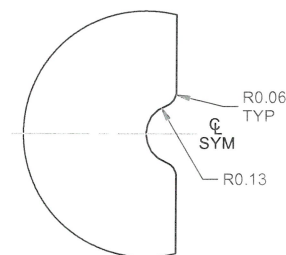


D3512-1 WEARPLATE
(MAKE FROM D3512-1F)



DETAIL B
SCALE 4X
4 PL

REFERENCE ONLY



DETAIL C
SCALE 4X
2 PL

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET ANNEALED 16 GAUGE 0.063 THICK
PER MIL-S-5059 OR AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240
REF DART SPEC. MS304S16GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.62 lbs

WORK IN PROGRESS

DESIGN	DW	DART AEROSPACE USA, INC.	
DRAWN	SAD	HILLSBORO, OR	
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	DD	D3512	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE ASSY	NTS
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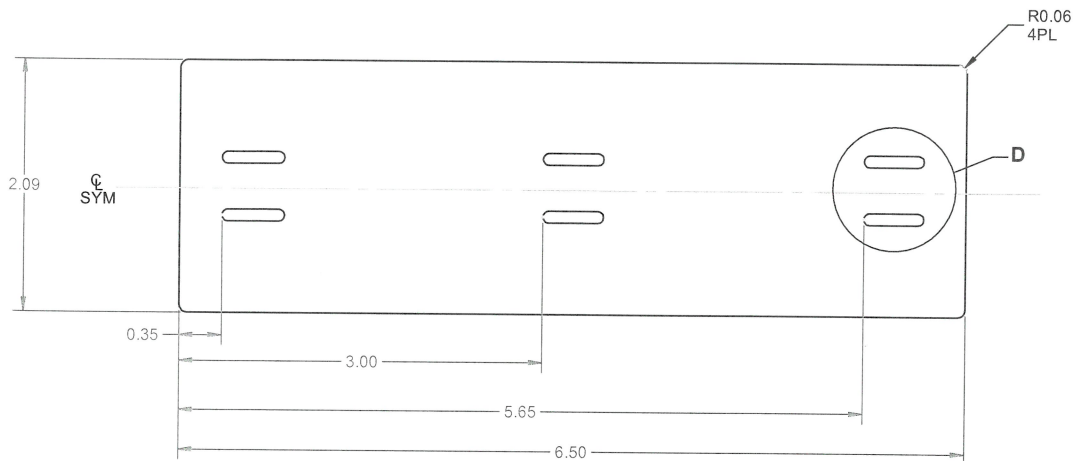
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D

C

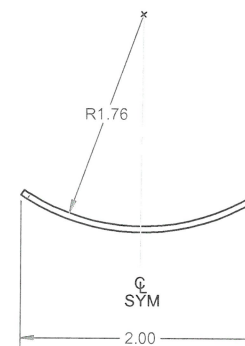
B

A

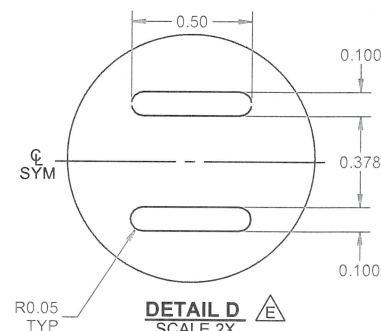


D3512-3F SPACER
(FLAT PATTERN)

REFERENCE ONLY



D3512-3 SPACER
(MAKE FROM D3512-3F)



DETAIL D
SCALE 2X
3 PL

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET ANNEALED 18 GAUGE 0.050 THICK
PER MIL-S-5059 OR AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240
REF DART SPEC. MS304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.19 lbs

WORK IN PROGRESS

DESIGN	DW	DART AEROSPACE USA, INC.	
DRAWN	SAD	HILLSBORO, OR	
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	DD	D3512	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE ASSY	NTS
DATE	18.03.07	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 7 6 5 4 3 2 1

Entered: JK Date: Oct 24/19



NCR No. 19-7548 **WORK ORDER NON-CONFORMANCE / ROUTE UPDATE**

Route update only ☐

Job: <u>201599</u> Part No. <u>D3512-1</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒		DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Engineering ☒ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Water Jet ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Supplier ☐ Quality ☐			
Date: <u>19.10.24</u>		Sequence #: <u>100</u>		QTY Affected: <u>19</u>		MRB (QSI042) DAS <u>51</u> <u>19/10/07</u> 9-89	
Description Work Order Deviation				Disposition		Completed By	
Cut on waterjet with D3512-1 at Rev. E minor change to Rev. D flat pattern for manufacturability, No change to final bent wearplate Ref 201458				Acceptable to cut D3512-1 OXF to Rev. E, It's to correct a minor fit issues from Rev. D Ref: w/o 193591		19/10/24	
						Lead hand / Supervisor	
						PD 19.10.24	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☒ Process Improvement ☐ Human Factors ☐				FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☒ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:							